CubeScanPC

Operator's Manual

Man, Machine & Medicine

Mcube Technology Co., Ltd.

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At the time of printing/transfer to the CD-ROM, this manual correctly described the software and its functions. However, as modifications may have been carried out since the production of this manual, the device package may contain one or more addenda to the manual. This manual including any such addenda must be read, before using the software.

The following situations void any guarantee(s) and obligations for Mcube Technology:
- The software is not used according to the enclosed manuals and other accompanying documentation.
- The software is installed or modified by persons other than Mcube Technology service technicians.

** "**SETTING UP CubeScan**" function is just only available to service engineer.

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GENERAL INFORMATION

This User Guide covers the basic informations of installing CubeScanPC software and using the upload function between CubeScan® and a PC / Notebook.

The following information is covered in this manual.

- Warning statements.
- Inteded use.
- PC requirements.
- Installing software.
- Operation
- Technical data

INTENDED USE

This CubeScanPC software is intended to add a scan image data upload function to the PC. The scan data is uploaded from the CubeScan®. The uploaded scan data is reviewed, maintained in PC, and printed using a printer connected to the PC.

CubeScan®

The CubeScan is a B-mode ultrasonic device that is intended for the measurement of residual urine volume. The device automatically calculates the volume using ultrasound images from a three-dimensional sector probe. The CubeScan saves scan image data up to 5 currently.

INSTALLING CubeScanPC Software

PC Requirements

Recommended PC requirements as follows.

- Operating system: Windows XP
- Processor: Pentium III, 500MHz (minimum).
- Main memory: 256MB (minimum).
- Hard disk: minimum 100MB free spaces.
- CD-ROM: minimum 10x.
- Monitor Resolution: minimum 1024*768.
- Keyboard and Mouse
- USB port: USB1.1 or USB 2.0

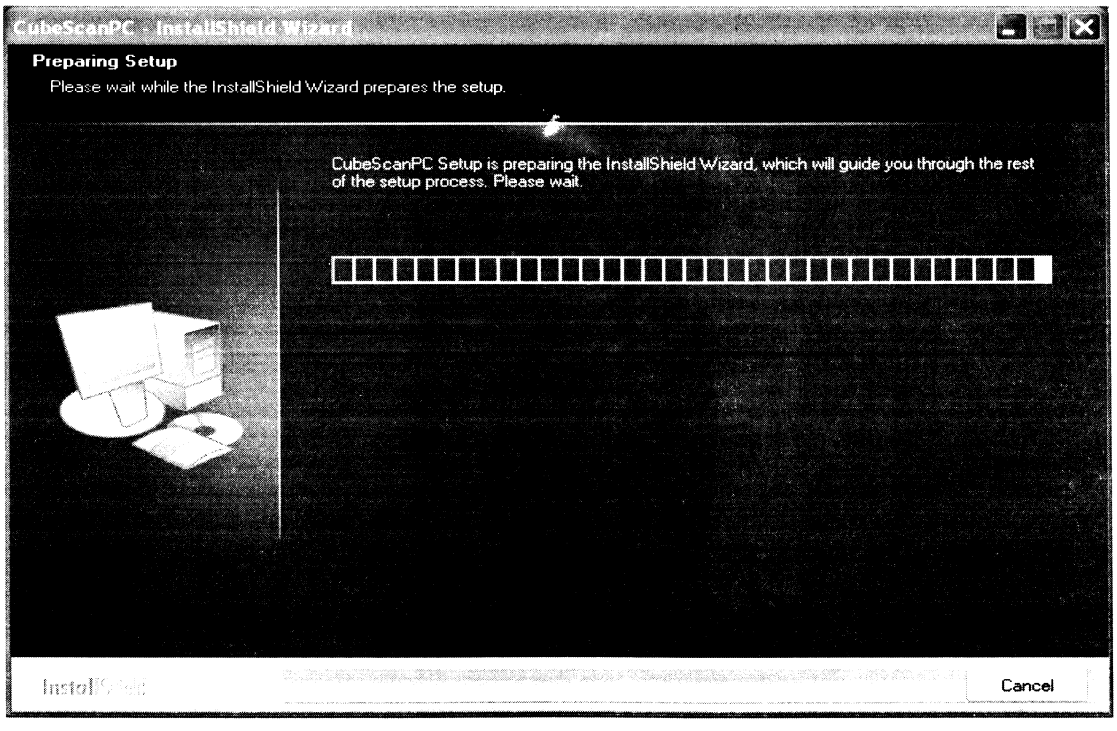
WARNING There is a need for 282KB of storage space on PC to save one scan data.

Installing Software

1) Insert a software CD on CD-ROM drive.

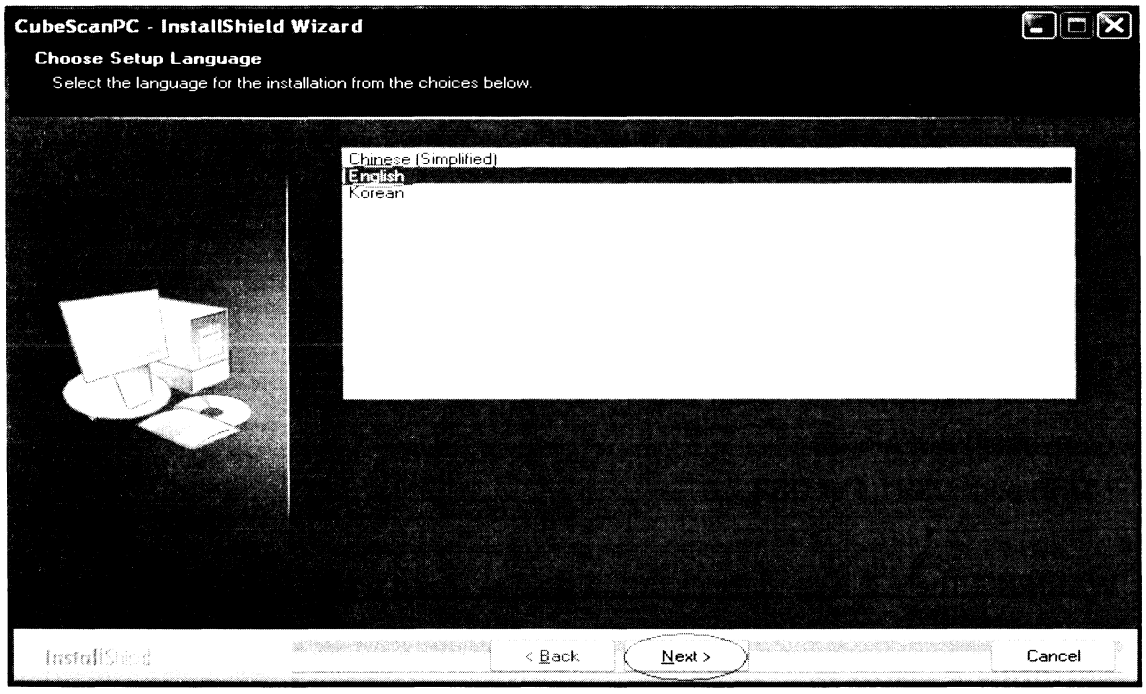
2) Double click ***CubeScanPC_Setup.exe*** of file at root folder in CD.

- Preparing setup dialog will be displayed as follows.

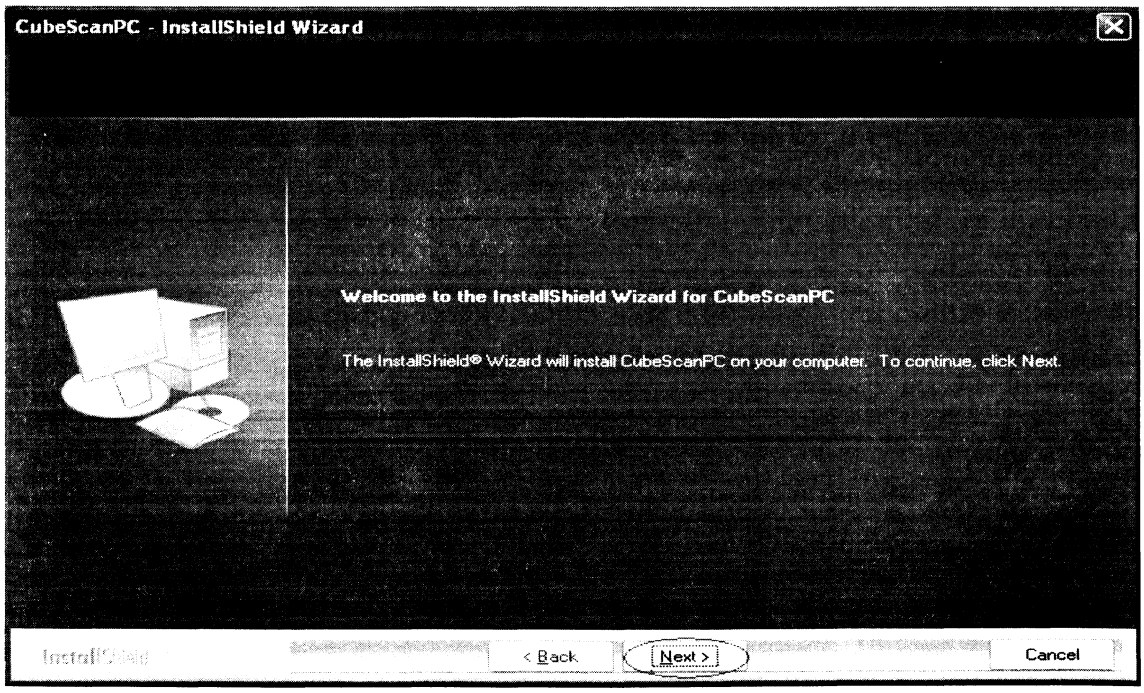

CubeScanPC - InstallShield Wizard
Preparing Setup
Please wait while the InstallShield Wizard prepares the setup.
CubeScanPC Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.
Cancel

- Choose setup language.

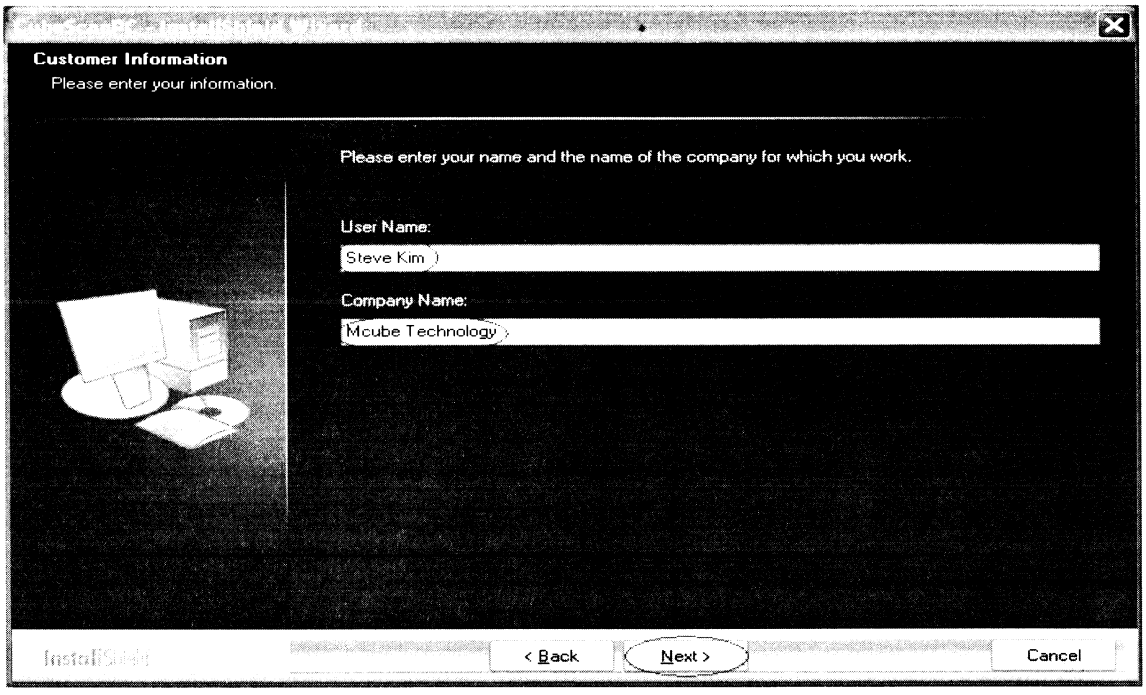
  Select setup language and click Next.



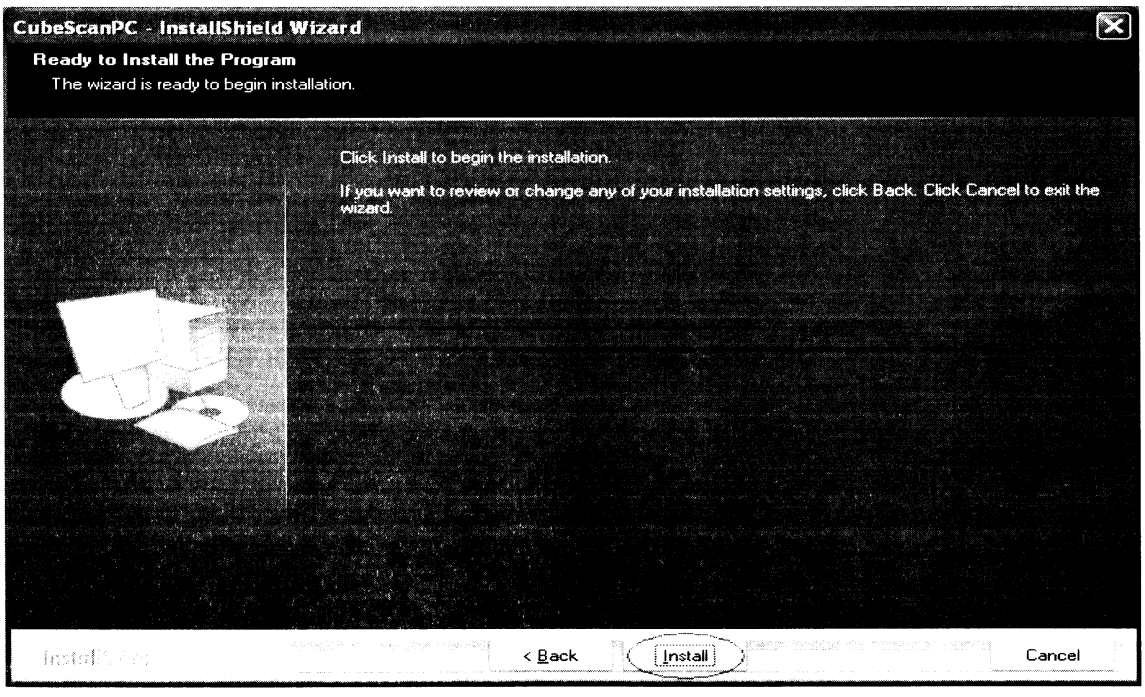
- Initial screen for installation - Click Next.


CubeScanPC - InstallShield Wizard
Welcome to the InstallShield Wizard for CubeScanPC
The InstallShield® Wizard will install CubeScanPC on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

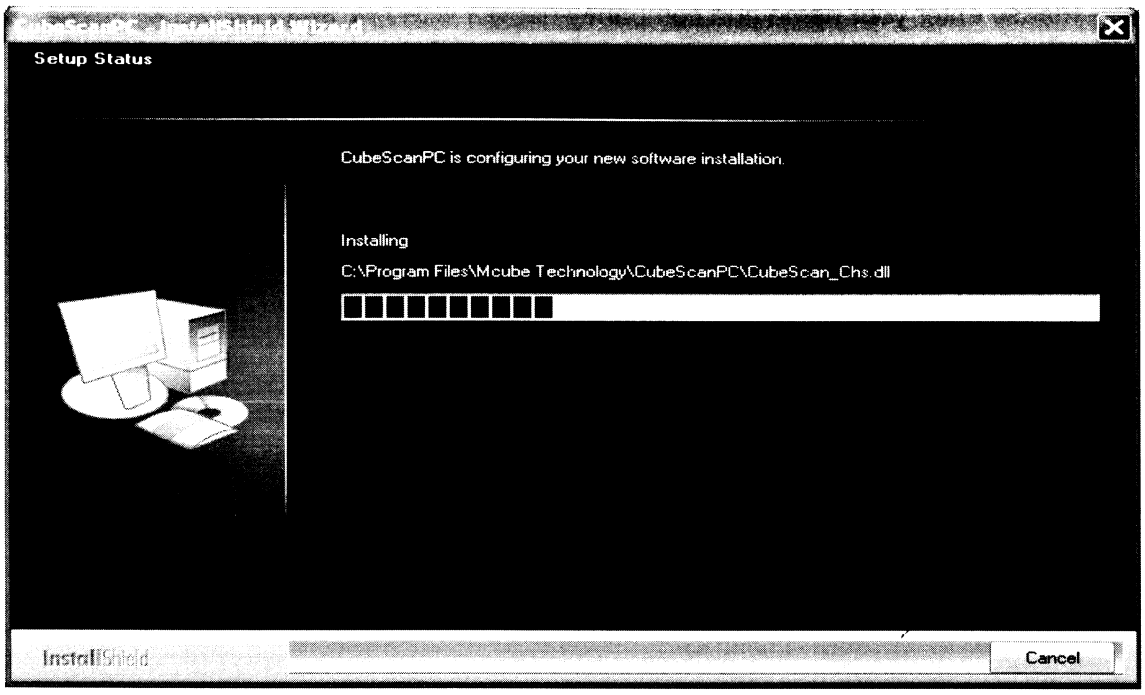
- Customer Information Dialog
  - Please enter your name and companey name.
  - Then click Next.



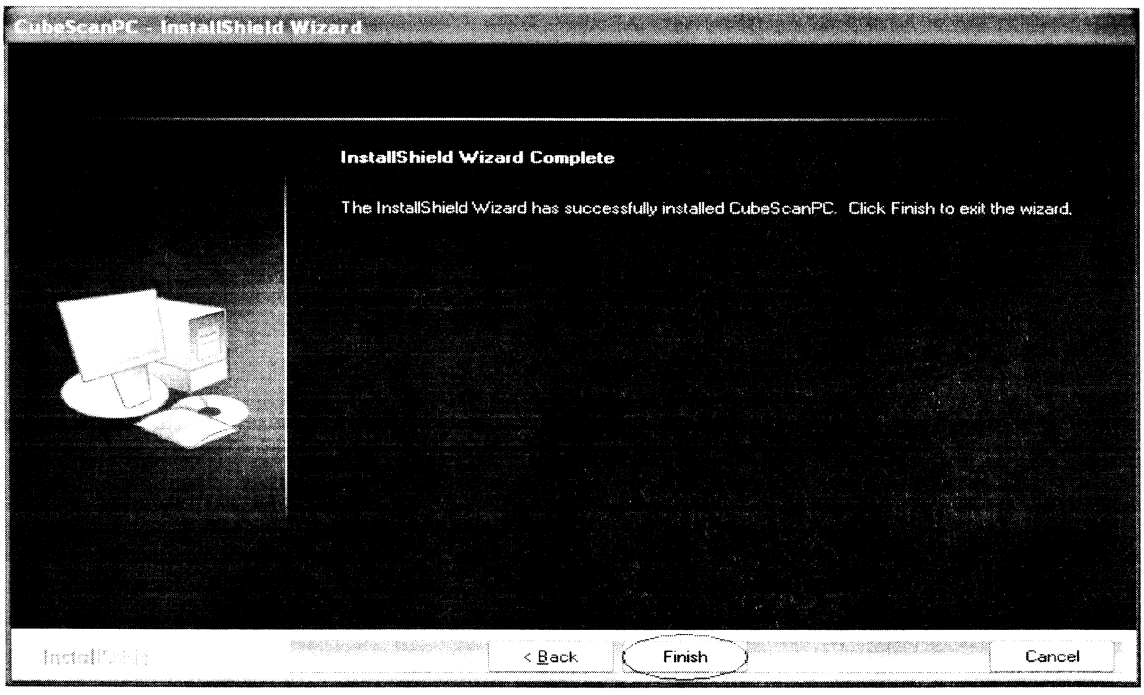
- Ready to start Installation.
  - You are ready to start installation. Click Install to continue.


CubeScanPC - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< Back
Install
Cancel

- Setup status dialog will be displayed during installment as follows.



- Finish dialog.
  - Setup is successfully completed. Click Finish.

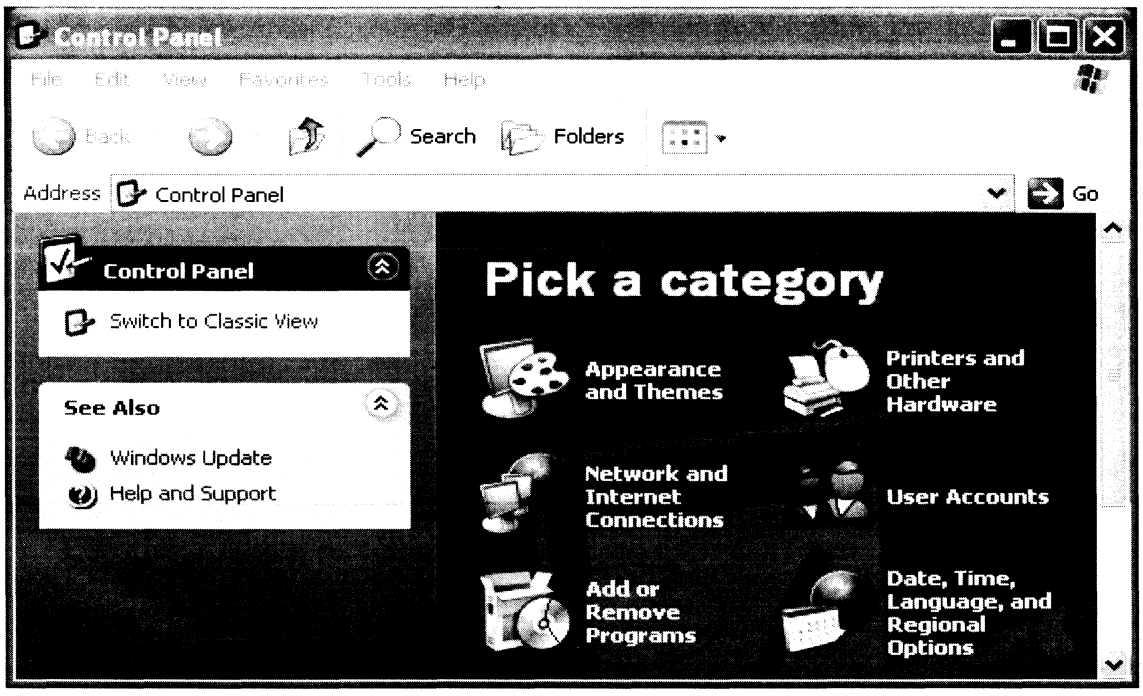

CubeScanPC - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed CubeScanPC. Click Finish to exit the wizard.
< Back
Finish
Cancel

Uninstalling Software

1) Click start button of windows.

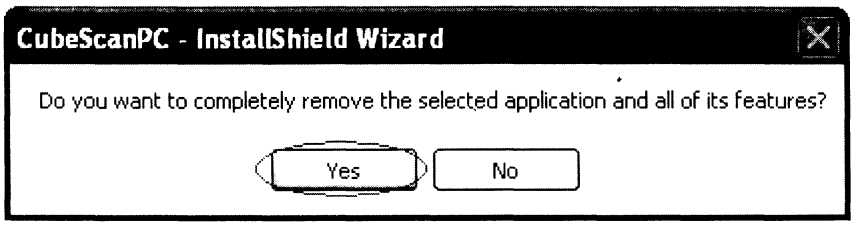
2) Click control panel.

3) Click Add or Remove Programs in control panel.

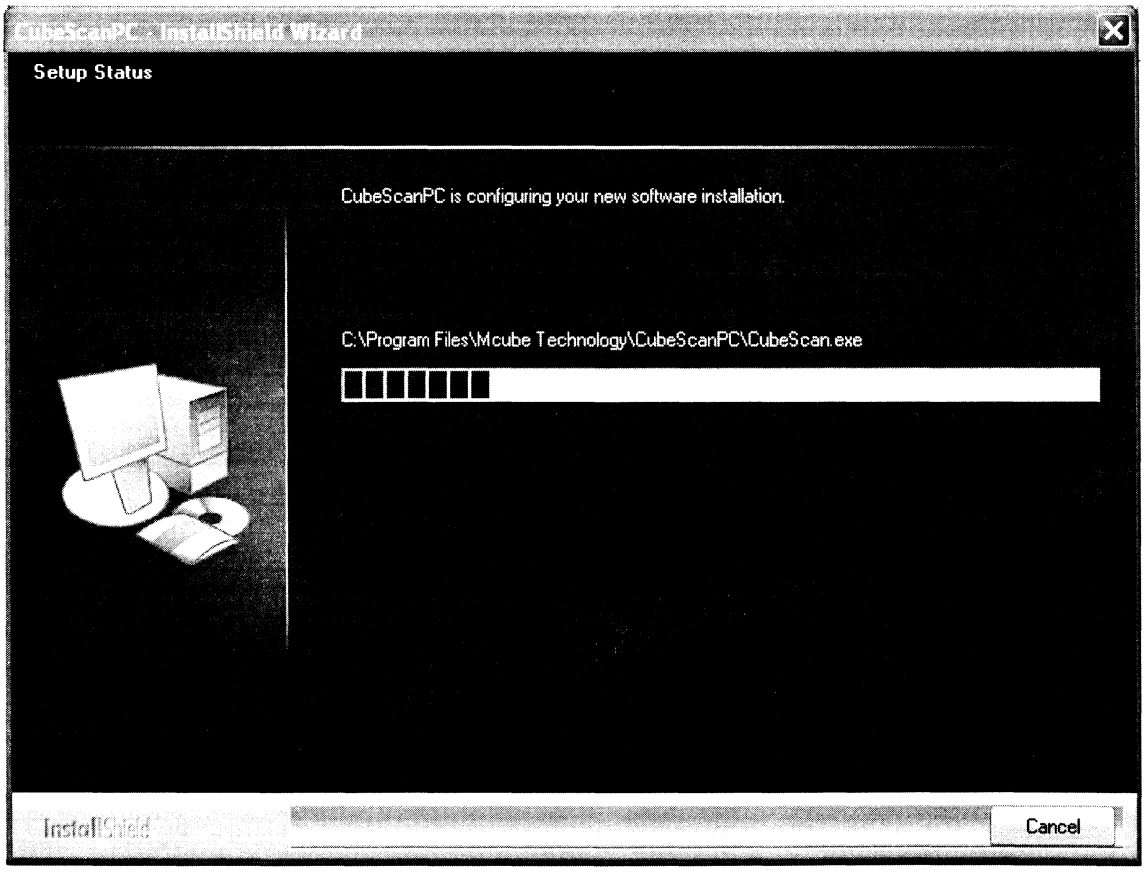


4) Click Remove for remove of CubeScanPC program.

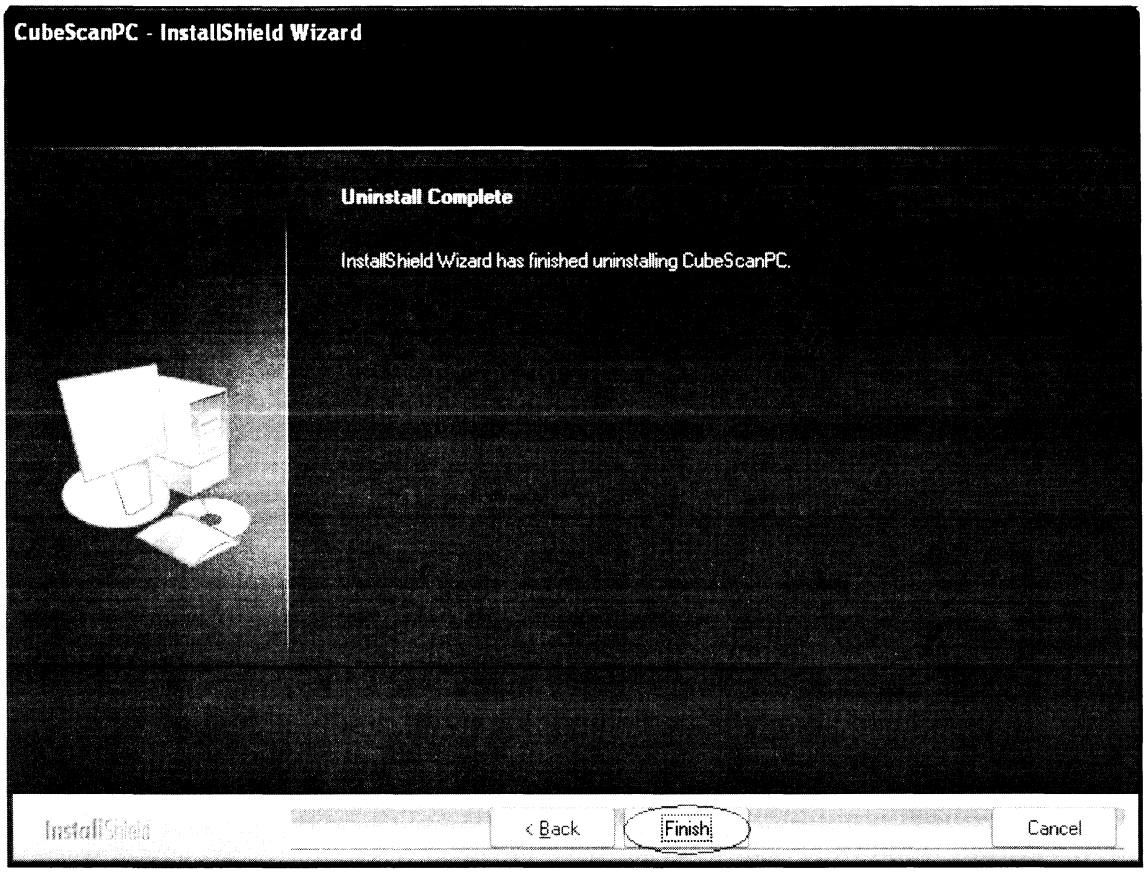
5) To confirm, click Yes.


CubeScanPC - InstallShield Wizard
Do you want to completely remove the selected application and all of its features?
Yes
No

6) Status dialog will be displayed as follows.



7) To finish, click Finish.



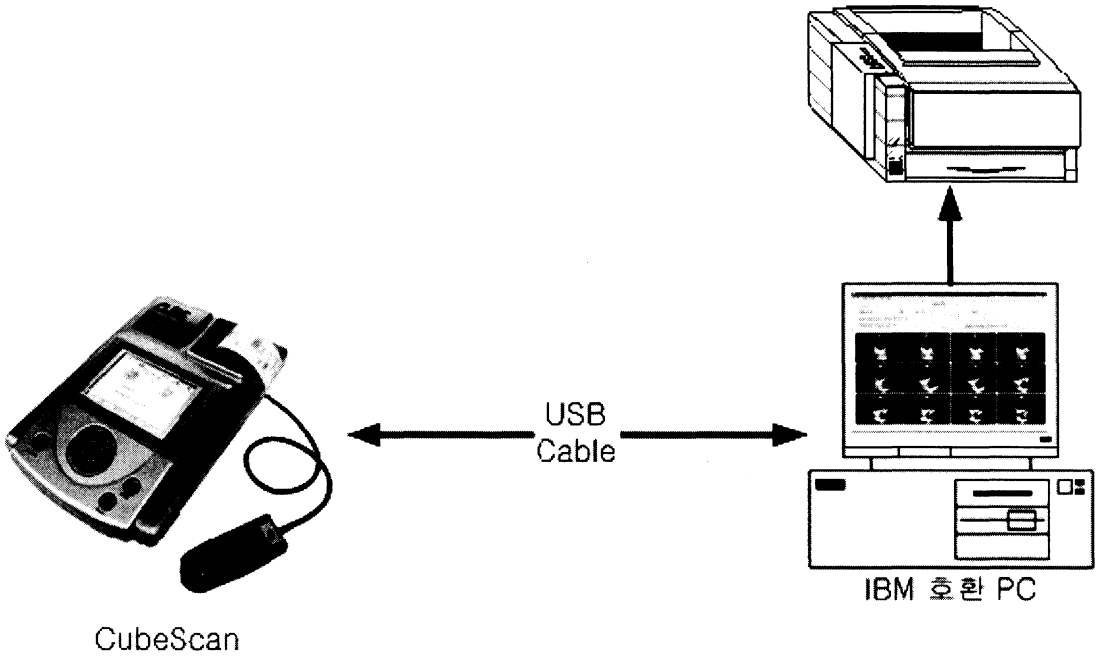
DEVICE DESCRIPTION

Parts Lists

Parts list included along with this software is as below:

- This User Guide
- 1 CD with CubeScanPC Software
- 1 USB cable

System Schematics



GETTING STARTED

Connecting to the CubeScan

1) Make PC connected to CubeScan through a USB cable as CubeScan is power-off.

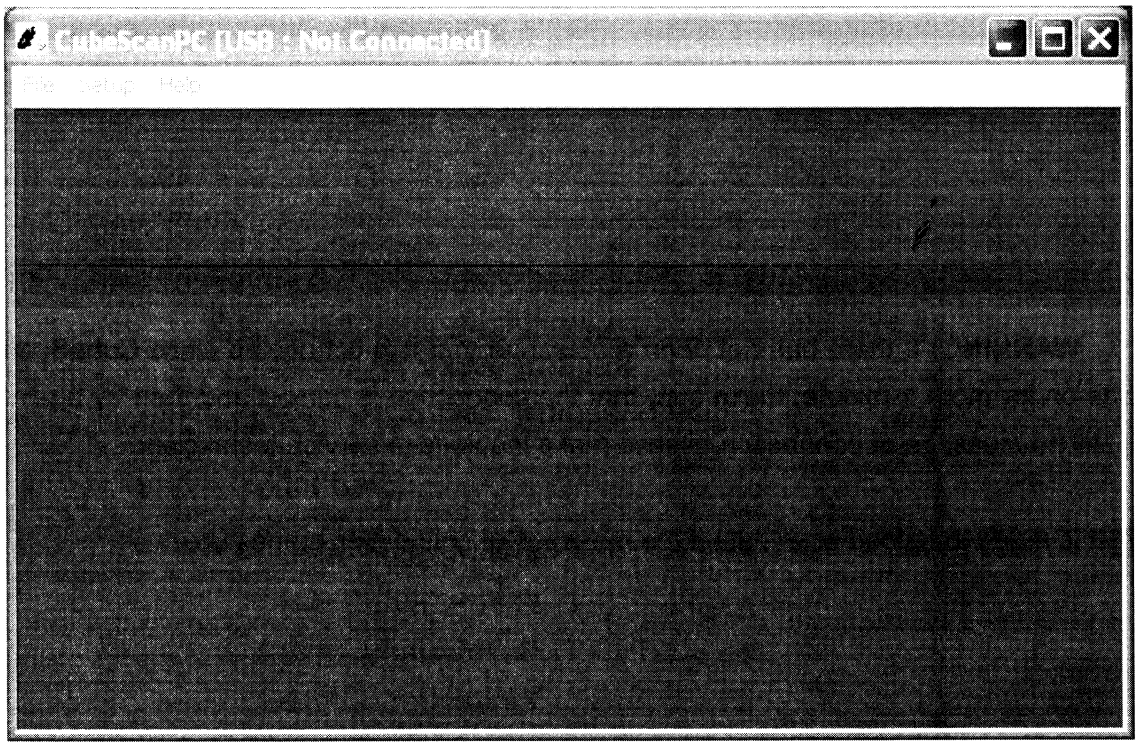
2) Click START button of Windows.

3) Click ALL PROGRAM

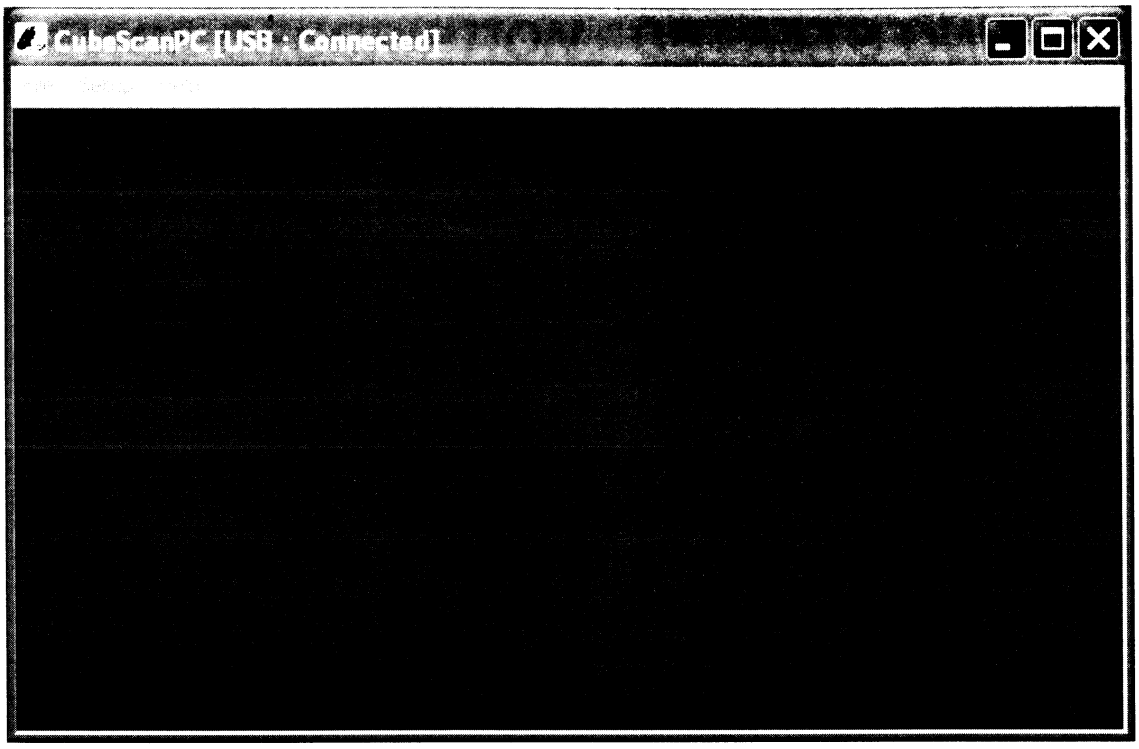
4) Click Mcube Technology

5) Click CubeScanPC

Then, initial picture is presented as below:



6) Turn CubeScan on. After power-on, the contents of program's title bar should be changed into as below:



WARNING: If there has not been a message that it is connected since CubeScan was on for more 1 minute, make sure that the connection is correct and then try again. If still no message of connection, please make inquiries to service technician.

7) It is ready to upload scan data if the message of connection comes up.

USE OF THE SOFTWARE

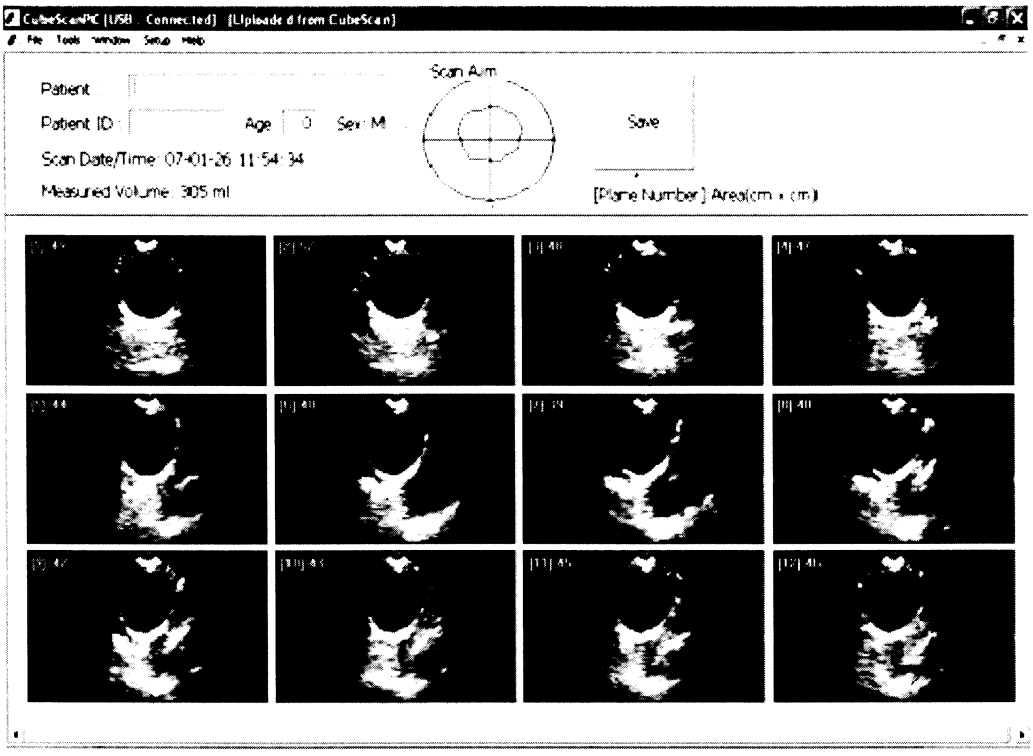
Upload the Scan Data

This function is used to get the scan data which has been stored lately from CubeScan.

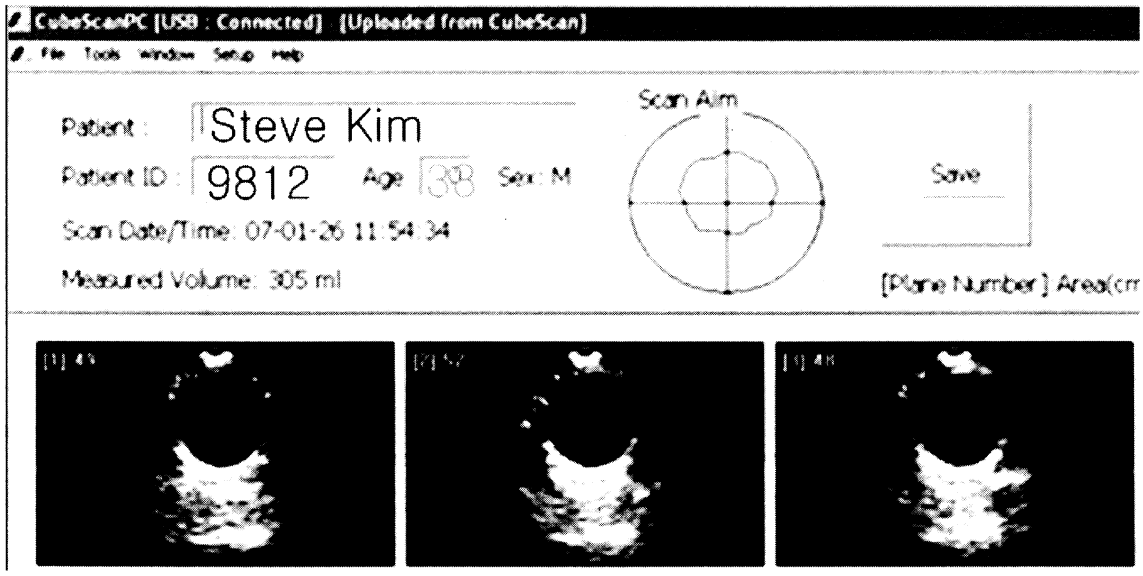
1) Check the connection status between PC and CubeScan in title bar.
2) Click File in menubar.
3) Click Upload.

4) During upload the upload status dialog which displays the progress of uploading will be display.

5) On upload completion, upload data will be displayed on PC monitor as follows.



6) Enter the patient information and save the contens using Save button.



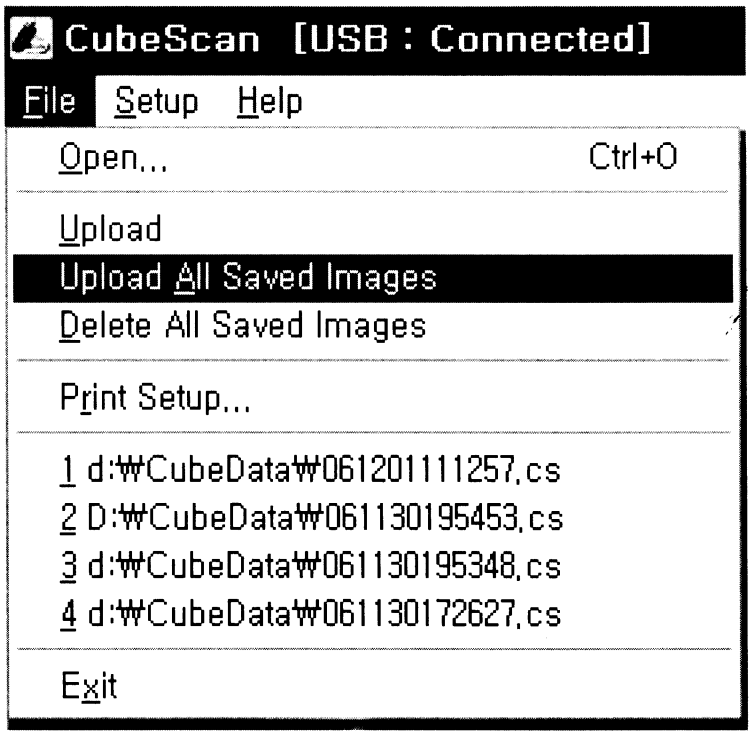
7) Refer to **Printing the Scan Data** for printing.

WARNING If you turn CubeScan off without storing data in CubeScan, you cannot upload unstored data. Be sure to store the data that you want to upload to PC.

Upload All Saved Scan Data

This function is used to upload all the stored data in flash memory.

1) Check the connection status between PC and CubeScan in title bar.
2) Click File in menubar.
3) Click Upload All Saved Images.



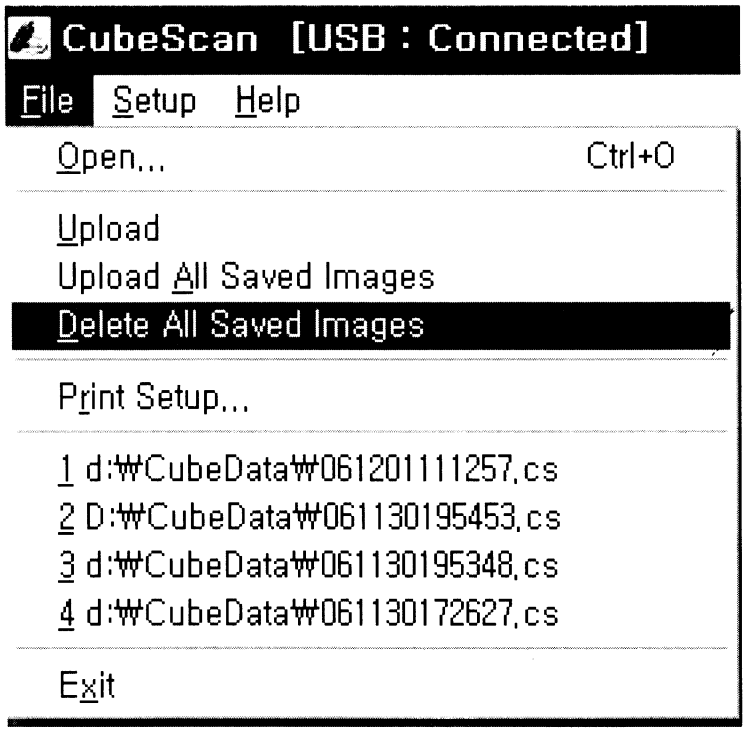
4) During upload the upload status dialog which displays the progress of uploading will be display.

5) On upload completion, upload data will be displayed on PC monitor as follows.
As many windows as the number of stored data will be displayed.
6) Enter the patient information and save the contens using Save button.
CubeScan stores up to 5 scan data currently.
7) Refer to **Printing the Scan Data** for printing.

Deleting All Saved Scan Data

This function is used to delete all saved data in CubeScan.

1) Check the connection status between PC and CubeScan in title bar.
2) Click File in menu bar.
3) Click Delete All Saved Images.



4) Dialog box for confirmation is presented as below.

** dialog box 추가.

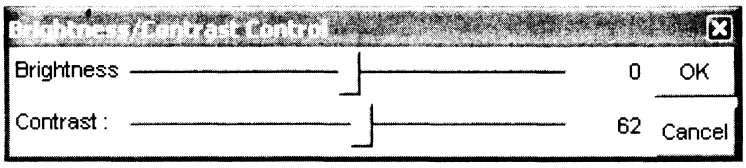
When you press Yes, all stored data will be deleted.

WARNING Function that deletes each stored data is not available right now.

Contrast/Brightness Control

Modify contrast and brightness of image on the screen.

1) Click Tools in menubar.
2) Click Brightness/Contrast....
3) Dialog box comes up for modification of brightness and contrast.



Change the level of brightness and contrast by moving slide bar in item of dialog box using mouse or keyboard's arrow key. You can see new image which is changed by applying new settings through moving slide bar

WARNING:Tools menu is on only if data file is open

Measuring Distance

This function is to measure distance between 2 points. The distance is measured as mm.

1) Click Tools in menu bar
2) Click Measure Distance
3) Press button of mouse on the left at the first point which you want to measure distance from
4) Move mouse to second point which you want to measure distance to as pressing button of the mouse on the left and then, release the button of the mouse on the left

Note: This function can measure only one distance. In order to measure another distance, repeat process from step1 to step 4 as above

Changing Image Size

This function is to modify size of displayed image. Available sizes are 50%, 75%, 100% and 200%

1) Click Tools in menu bar
2) Click Image Size
3) Click size which you want to modify into

Note: The function of adjusting image's size only affects display on the screen. It is always printed at the size of 100%

Printing the Scan Data

This function is to print scan data which is on the PC at present

1) Click File in menu bar
2) Select printer which you want if several printers are available to be used
3) Click Print

Note: You can preview layout by using Print Preview in menu bar

SETTING UP CubeScan

You can modify parameter's values of CubeScan and upgrade CubeScan's firmware through this function.

Functions in this part might not be operated in software distributed for users

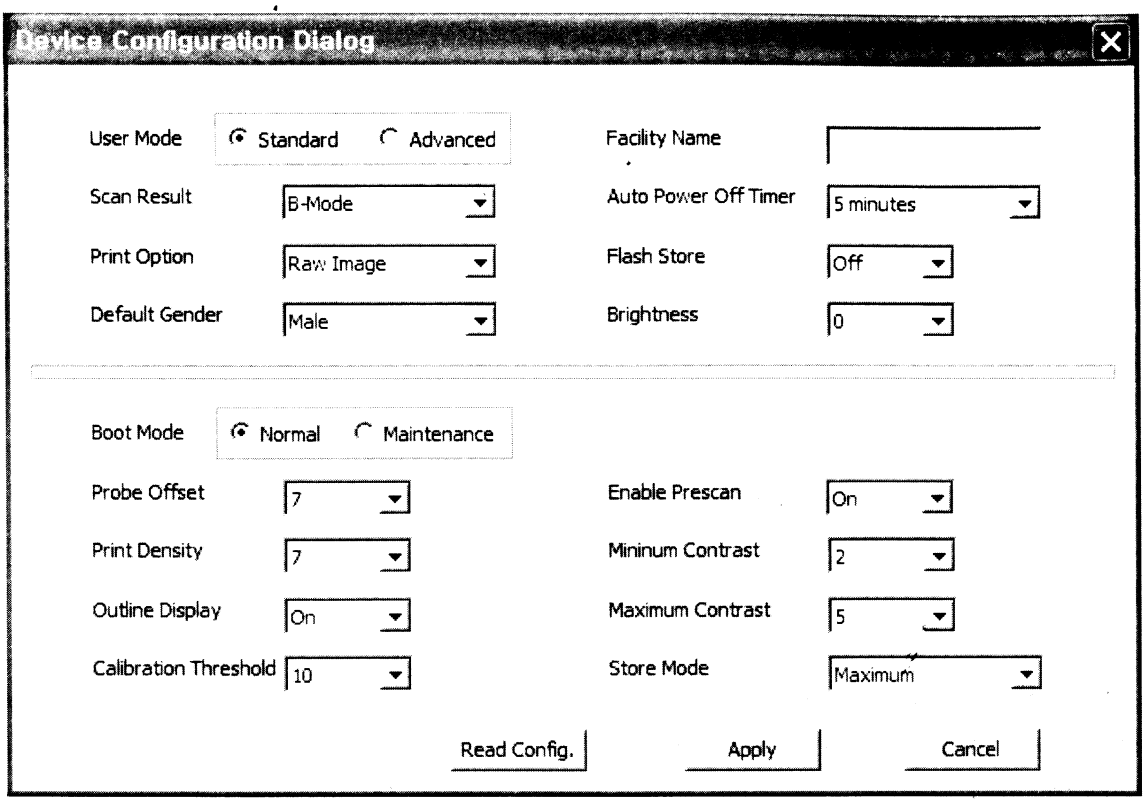
WARNING: Make sure that this function in Setting up CubeScan should be done with a lot of care. The functions should be operated after you need fully to understand the functions of parameter

Setting up the Parameters of CubeScan

Set up values of parameters of CubeScan.

IMPORTANT: It is needed to read the values of parameters of CubeScan carefully first before this function is operated and then remember values of Probe Offset and Calibration Threshold. Because these values should be modified only by service technician, they should be set up as original values

1) Click Setup in menu bar
2) Click Device Configuration
3) Dialog box is shown as below



NOTE: In the dialog box it is separated into two parts. Upper parameters are explained in user's manual and lower parameters are in service manual

NOTE: Even though the function of prescan is set as ***'On'*** in this part, It might not be practiced according to CubeScan version

4) Click Apply button to change the setup value of CubeScan.

NOTE: For facility name it is only available as below
English and number

Getting up the Parameters of CubeScan

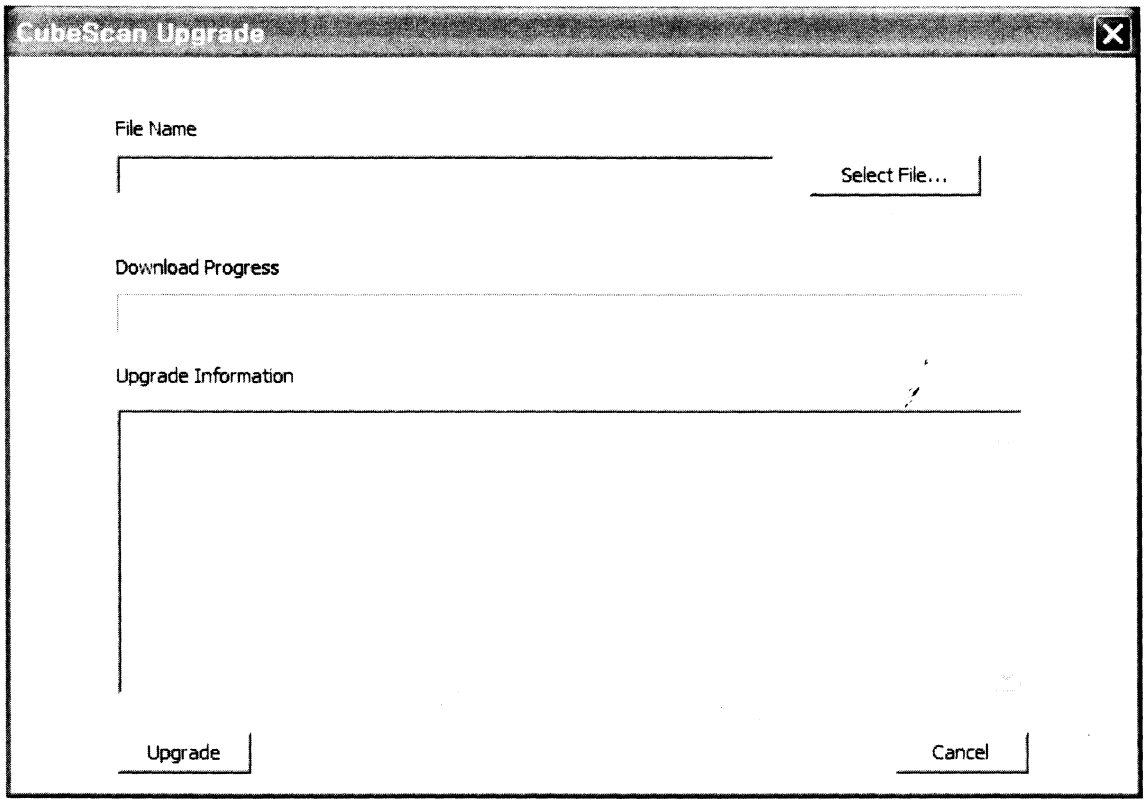
1) Click Setup in menu bar
2) Click Device Configuration
3) The Device Configuration Dialog is shown.
4) Click Read Config. Button

Upgrade the Firmware of CubeScan

1) Click ***Setup*** in menu bar

2) Click ***Program Upgrade***

3) Dialog box comes up as below:



4) Click Select File... button.

A dialog box is on for selecting file, choose firmware file to be upgraded.

NOTE: Firmware's file extension is .bin

5) Click ***Upgrade button***

In the middle of upgrading, status is displayed in upgrade information window.

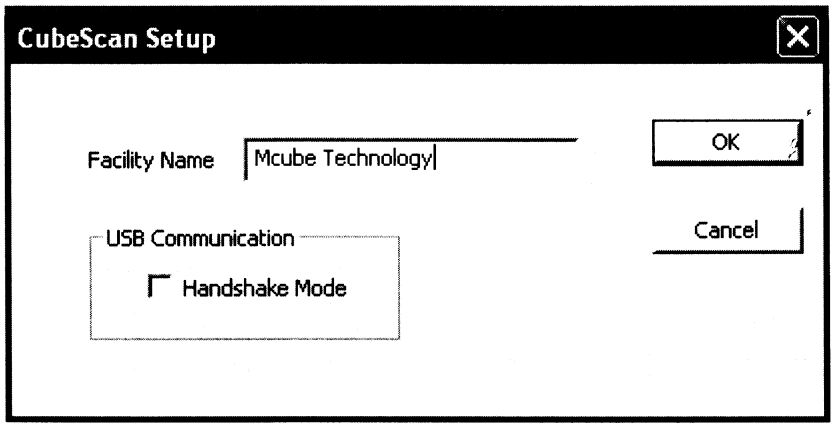
WARNING: Firmware upgrade should be done as battery is fully charged. Should not turn off CubeScan in the middle of upgrading. If it is off, CubeScan does not work properly.

SETTING UP CubeScanPC

This is to change information of CubeScanPC's settings. Available function is to input Facility Name.

Facility Name

1) Click ***Setup*** in menu bar
2) Click ***CubeScanPC Setup***



3) CubeScanPC Setup Dialog is presented. Put facility name which you want.
4) Click ***OK*** button

NOTE: Facility name to be input here is different from one in Device Configuration menu. Facility name in Device Configuration is value saved in CubeScan and facility name in this part is value for printing facility .

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